AMENDMENTS TO THE CLAIMS

Claims 1-14. (Canceled)

15. (Currently Amended) An apparatus ~~Means~~ for the replacement of a section and internal operations of a primary pipe of the primary circuit of a nuclear reactor cooled by pressurized water, said primary pipe interconnecting a first and a second component of the primary circuit of the nuclear reactor comprising:

means for cutting out a section of the primary pipe which has to be replaced,

means for supporting the end parts of a new replacement section in positions facing the ends of the remaining parts of the pipe,

means for bevel welding the end parts of a new replacement section of the primary pipe to the ends of the remaining parts of the primary pipe, and

handling means for removing ~~which can be used to remove~~ the section of the primary pipe which has to be replaced and inserting the new replacement section for positioning the replacement section in a ~~it in the~~ welding position between the ends of the remaining parts of the pipe,

wherein the apparatus ~~it~~ additionally comprises means for working within the primary pipe and ~~means for introducing the means for~~ carrying out work in ~~into~~ the primary pipe after introduction through one of the first and second components of the primary circuit of the nuclear reactor and after the new replacement section has been welded to the remaining parts of the primary pipe, the means for carrying out the work being able to move along the primary pipe from said first or second component to the new replacement section welded to the remaining pipes of the primary circuit.

16. (Currently Amended) Means according to claim 15, wherein the means for carrying out work comprises: ~~a~~

an anthropomorphic robot arm ~~of the anthropomorphic type~~, a support, ~~for the means for carrying out work within the primary pipe comprising~~ means for securing the robot arm and a carriage to the support for moving the support and the robot arm within the primary pipe ~~to which the support is secured, comprising~~ and two sets of wheels and drive motors providing a rotational drive to at least one wheel in each set of wheels of the carriage for moving the carriage ~~it~~ within the primary pipe.

17. (Currently Amended) Means according to claim 16 ~~15~~, wherein the support comprises a structure for supporting the robot arm, two supporting shoes controlled by jacks and one locking shoe controlled by a jack which bear against opposite parts of the inner surface of the pipe.

18. (Currently Amended) Means according to claim 15, wherein the means for introducing the means for carrying out work into the pipe through a component of the primary circuit comprise a transfer surface for lateral movement in a horizontal plane on which there is movably mounted, in a direction in the horizontal plane, a supporting table and a lift for moving a supporting plate for the means for carrying out work borne on the supporting table in a vertical direction, the transfer surface being secured above a horizontal surface of the first or second components ~~component~~ of the primary circuit through which the means for carrying out work is introduced into the primary pipe through, ~~surrounding~~ a vertical axis opening providing access to an internal part of the component of the primary circuit communicating with the inner part of the primary pipe.

19. (Currently Amended) Means according to claim 15, wherein ~~and also incorporating a support comprising~~ an access gangway communicates ~~to a part communicating~~ with the interior of the primary pipe ~~of the component of the primary circuit~~.

20. (New) Means according to claim 15, wherein the first or second component through which the means for carrying out the work are introduced is chosen between either a reactor vessel or a primary pump of the nuclear reactor.

21. (New) Means according to claim 15, wherein the means for carrying out the work comprise means to carry out at least one operation of machining, inspecting or welding an inner part of the joined welded ends of the new replacement section and of the remaining parts of the primary pipe.

22. (New) Means according to claim 15, wherein the means for bevel welding are able to weld the end parts of the new replacement section to the ends of the remaining parts of the primary pipe while the supporting means support said end parts in position.

23. (New) Means according to claim 16, wherein the arm incorporates an end part bearing a rapid attachment device for automatic tools.

24. (New) Means according to claim 16, wherein the arm has six axes of motor-driven rotational movement.